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ABSTRACT

Examining the impact of computers in language arts instruction, this journal issue focuses on the practical classroom use of computers. The essays discuss the following topics: (1) using the personal computer to organize the language arts curriculum; (2) computers in a writing project; (3) the potential of microcomputers for English classrooms; (4) word processors in the composition classroom; (5) the effect of word processors on reluctant or poor writers; (6) software for English instruction; (7) finding and evaluating language arts software; (8) research supporting the use of computers in language arts; (9) teaching ideas for writing to learn; and (10) materials for a unit on censorship. (HTH)

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Virginia Association of Teachers of English

Winter 1983

Alan M. McLeod, Editor

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FOCUS: Computers in Language Arts Dedicated to: RICHARD A. MEADE

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TWO STACKS LATER: No Honor More Right

Alan M. McLeod

When Richard Meade died in June, VATE lost not only an important link with the past but a valued wellspring for the future. He devoted more than half a century to the teaching profession. His gentle counsel at Executive Board meetings, his stature in and influence upon NCTE and the profession, his concern that English be taught effectively and considerately will be intensely missed.

I began the Spring 1981 number thus: "In some ways this is a column difficult to write. One of my professional mentors, a man on whom I depended so much for advice, and who so willingly and gently shared his vast wisdom . . . who had in his heart always a sense of the richness of studying English and a desire that it be an exciting experience taught well. . . ." I was then writing about Foster Gresham, VATE's longtime Executive Secretary; those words are all the more poignant now, for they apply so rightly to Dick Meade. Those of us who knew him well discerned a true *gentle-man:* knowledgeable, active, kind, dignified, caring, informed are apt but hardly adequate descriptors. Fortunately two individuals who also knew him well, and who feel as intensely as I his loss, describe eloquently in the following pages the essence of this outstanding educator and his distinguished contributions to the profession. Thank you, Bob and Joe.

Because Dick was always a forward thinker, frequently ahead of his time, it is compelling that this VEB issue, in many respects a tribute to him, focus on using computers in English language arts. Like some of us, Dick recognized the possibilities for improved composing afforded by the computer-word processor; unlike most of us, he anticipated other interactive opportunities and would have explored means by which this development could be used to *enhance* our teaching. As Dick might have said, the computer is not a threat to those who teach communication and explore the values, feelings, and insights that make us human; it is an opportunity to increase that learning.

When he was alive, VATE honored Dr. Meade with a life membership and its first Distinguished Service Award (See *Virginia English Bulletin,* Winter 1982, p. 59). In his memory, VATE has more recently honored him by establishing the RICHARD A. MEADE STUDENT TEACHING SCHOLARSHIP. The first scholarship will be awarded in the 1984-85 academic year to a highly capable student preparing to teach English. Contributing to the development of English teachers was Dick's first professional love. No honor could be more fitting; VATE could have done nothing that would have pleased Dick more.

IN MEMORIAM

Richard Andrew Meade, 1911-1983

President of VATE, 1936 and 1948
NCTE Liaison Officer, 1957-1980
NCTE Board of Directors, 1936-1980
Chair of VCEE, 1980-82

Former teacher of English at Greensville County High School (1931-34) and Lane High School (1934-1950); Professor of English Education at the University of Virginia (1934-1982); for twenty years the director of the University of Virginia Annual Conference for Teachers of English.

VATE'S Most Distinguished Member

In June, Richard Meade died, and we lost a man of profound influence. English lost one of its most important thinkers. NCTE lost one of its leaders. VATE lost its greatest living member. The University of Virginia lost a scholar and teacher. Those who knew him and studied with him lost a model, guide, and much beloved advisor. And I lost the man who shaped my life as a teacher.

English Education will miss him. He was the author of a series of English textbooks, *Effective English* (Allyn and Bacon, 1961), that, before its time, looked at language from the point of view of students, emphasizing skill and proficiency, but in terms students could understand, with correctness emphasized after fluency. In 1973 he co-edited a book of readings for teachers about the literature that teenagers like to read and find rewarding. That book, *Literature for Adolescents: Selection and Use* (Charles Merrill), emphasized both helping students to find books that they will enjoy and teaching literature as a part of the students' lives, not as monuments to be passed by as in a museum.

He worked with school systems in Virginia and across the nation to help them redesign their curricula. Virginia Beach and Roanoke, West Virginia and Tennessee, Indiana and North Carolina called on him for advice about their English programs. Throughout his life, he guided teachers

to care for their students first and their subject next. He sent doctoral students into the world who, because of what he taught and his example, care to help their students as he helped them. More important than his many books and articles is the fact that he reminded us that the sometimes good, frequently shy, often inarticulate, and many times unhappy people who are our students are important as people; that matching them with English, not forcing English on them, is what teaching is about.

The National Council of Teachers of English lost a leader who gave it much and for many years. As a member during the early sixties of the Committee on the National Interest and the Teaching of English, he helped the profession to face an earlier attack on the teaching of English and schools in general. The lessons that that commission taught us then are ones that we need to relearn in this time of national attention to education. As a member of the committee, he helped to author its publication, *The National Interest and the Teaching of English (NCTE, 1951).*

A member of the Commission on the English Curriculum from 1960 to 1966, he helped to launch NCTE's curriculum series; and he was one of the authors of that committee's important publication, *Ends and Issues, 1966.* The 1963 edition of *Reading Ladders for Human Relations* reflects his work as a part of the committee that prepared it. In 1964, NCTE published his report, *Fifth-Year and Five-Year Programs for the Preservice Education of Teachers of English.* From 1958 to 1963, he served as the state coordinator for Virginia of NCTE's Achievement Awards in writing competition; and he chaired NCTE's Resolution Committee in 1961.

A founder of the Conference on English Education, he served as program chair in 1965 and as a speaker at its meetings and author of articles for its journal, *English Education.* The *English Journal* published his works regularly throughout his career. Such articles as "Who Can Learn Grammar?" in 1961, "A Theory of Curriculum for the Teacher of English" in 1971, and "Teacher Education and Language Change" in 1977 remain classics of their subjects. In 1982, at its national convention General Session, NCTE and VATE honored Dr. Meade's service to the profession.

But not only NCTE will miss Dr. Meade. VATE, to which he gave so many years of dedicated service, will miss his strength and wisdom. He was twice the president of VATE and served for many years as liaison to NCTE, giving VATE his strong voice in national affairs. His service on and chairmanship of VATE committees helped shape every aspect of the organization. In 1976, NCTE funded a VATE proposal, only one of three in the nation, to provide inservice education to school systems with special needs. Dr. Meade chaired the VATE committee that wrote that proposal. His articles for the *Virginia English Bulletin* were numerous and influential. They covered an amazing array of subjects from behavioral objectives to individualized reading to thematic units. In 1982, VATE thanked

Dr. Meade by giving him a Distinguished Service Award, the only such award in its history.

The University of Virginia will also miss Richard Meade. For nearly fifty years a member of its faculty, he served from 1967 to 1971 as the chair of its department of curriculum and instruction and as director of three NDEA summer institutes for teachers of English. From 1967 to 1970 he was associate director of Virginia's EPDA Prospective Teacher Fellowship Program.

For his work as teacher and scholar he was named in 1973 one of the University's Sesquecentennial Associates. He used the time provided to study children's language. In 1980, he was named the School of Education's first "Outstanding Educator." When he retired in 1982, the School of Education thanked him with a formal ceremony; and his students from across the country came to thank him in person. To honor him at that time, the University established a fellowship program in his name to support the education of other teachers of English.

But in many ways, those of us who were fortunate enough to be his students and his friends will miss him most. Wherever we are, teaching sixth grade language arts or preparing teachers, serving as president of a district association or advising a student teacher, helping teenagers find insights from the literature they are reading or revising a school's curriculum, we have lost a touchstone of our professional lives. Yet we know that what he taught us is not just encompassed in the books and articles that he wrote, not just maintained in the work of the organizations that he led and advised. More important to us than any of these influences is his example of what a truly great teacher can be. His kind, loving, caring attitude toward students will always be a model for those of us who knew him; and, if we are successful, for those teachers whose lives we touch. That example will surely help us to overcome the currently popular urge to be harsh with students in order to make them learn.

And I will miss him. He taught me how to teach English when all I had was a master's degree in the British novel and the arrogant idea that I was chosen to save high school students from their ignorance. Gently, he started me on the way to discovering that teaching is helping, guiding, urging, caring, not dictating, forcing, dominating. I was a slow learner, but I learned. Since then, he has always been there, sharing with me the editing of a book, advising me on the writing of an article, reminding me of the scholarly standard that I should try to meet, urging me to care more for my students, telling me that it is not just English that I teach but English in the lives of my students, encouraging me to live up to the ideals that he taught me. Still, his example will always be there, and I will never forget it. Like his other students, I loved him; and the empty spot in my life that this dear, kind, honest gentleman filled will now be empty. More than anything else, it is the friend that I will miss.

Robert C. Small is Professor of English Education at Virginia Tech. He and Dr. Meade collaborated closely over the years; among their endeavors is the book Literature for Adolescents: Selection and Use *(1973).*

Richard Meade (second from the right) was instrumental in the evolution of the "Literary Map of Virginia" (1957) and many other VATE endeavors.

English Education, Baseball, and Sweet Potato Pie: Loves of a Man for All Seasons

Two years ago Richard Meade wrote in this journal a memorial tribute for his friend Foster Gresham. The epitaph he used for Foster—that we "shall not look upon his like again"—suits Dick Meade equally well. As Foster personified VATE through his long service as Executive Secretary, so Dick Meade embodied English education in Virginia. He was proud that he created the first *bona fide* curriculum and instruction program in English in Virginia. He worked hard to raise English teacher preparation and certification standards so that colleges and universities in the state would not allow prospective English teachers to graduate with merely a course in "general methods" to guide their teaching.

He believed that English teachers needed a thorough knowledge of language, literature, and composition, and that their teaching should be informed by theories and practices validated by research. He believed that English student teachers and veteran teachers should be supervised by trained English educators, not some university generalist or school administrator without an English education background.

The many fine English teacher preparation programs we now have in Virginia are part of Dick Meade's legacy. Paul Slayton at Mary Washington College, Bob Small at Virginia Tech, Alan McLeod at Virginia Commonwealth, Martha Craddock at Lynchburg College, Charles Stallard at Old Dominion, Jo Leslie Sneller at Longwood, and Mary Edwards at Randolph Macon College are just a few of the former students who continue the work he loved—helping English teachers become and remain

true professionals. That spirit and concern have been carried by other former students to different states; Guy Ellis to Georgia, for example, or Bill Peters to Kentucky and Texas, and Elizabeth Haynes to South Carolina.

Although I was not one of Dick's students officially, he was the best teacher and friend I ever had. For the twelve years we worked together at the University of Virginia, which he served for forty-eight years, I marvelled at his good sense and intelligence, at his skill as a teacher, speaker, and writer, at the affection and admiration he engendered in students, at the immense respect his work evoked from his colleagues at other universities across the country.

What made working with a man of such stature a joy and not a burden was his indigenous warmth and good humor. He had great faith in and patience with teachers, including a younger colleague with a Polish name. That faith and patience gave many of us the confidence to persevere and occasionally to succeed as English educators.

I will always remember Dick's stories—wonderful educational parables — told in his inimitable Dinwiddie County accent. I will miss our annual drives to Baltimore to see the Orioles play. I learned so much from him during those drives: how DAYLIGHT SAVING came to be DAYLIGHT SAVINGS, how Virginia lost West Virginia, how one of the few teachers he ever gave up for lost swore "If they can read, I can teach them reading; If they can't read, I can't teach them reading." I also learned how Dick had taught Air Navigation for cadets (very competently, I'm sure) at the University during World War II. Ironically, he took his own first flight in 1973 when we flew to a Conference on English Education convention in Colorado Springs.

Just as Dick loved baseball, he also loved entertaining at his home on University Circle. He and his wife Mildred were wonderful hosts. An evening with the Meades always left me appreciating their tastes in gardening, conversation, and food. Ever the Virginia gentleman (in the best sense), Dick was a liberated master of many trades, including cooking. One of his favorites was sweet potato pie, a dish which, like others he judged zealously, was only good if it was "just right."

For years, the Meades carried their tradition of hospitality across the state to VATE conferences and across the nation to NCTE meetings. Either at the Meades' hotel room or a restaurant properly scouted, there would almost annually be a reunion of Dick's former students and other admirers. I know he would like us to continue that fellowship among ourselves at those meetings and with Mildred in Charlottesville.

I am thankful that I can appreciate his wisdom still. His fine studies and essays on grammar, composition, adolescent literature, and language change are preserved in *Virginia English Bulletin, English Journal,* and other books and journals. I include at the end of this tribute a selected bibliography of his work for your reference.

I will adapt Dan Fogelberg's "Leader of the Band" to close:

Thank you, Dick, for your stories of the road.
Thank you for the gifts we can't repay.
You guided us with velvet hand.
We are the living legacy to the leader of the band.

Selected Bibliography of the Works of Richard A. Meade

(See other citations in Robert Small's tribute in this issue)

English Education
"Teacher Education and Language Change," Fall 1977, pp. 3-10

English Journal
"Who Can Learn Grammar?" February 1961, pp. 87-92
"Paragraph Development in the Age of Rhetoric," February 1971, pp. 219-226 (with W. Geiger Ellis)
"A Theory of Curriculum for the Teacher of English," April 1971, pp. 469-473
"Whatever Happened to Insights," December 1971, pp. 1234-1237
"Language Change in this Century," December 1978, pp. 27-30

Virginia English Bulletin
"Behavioral Objectives for English?" Winter 1971, pp. 3-7
"Individualized Reading in Virginia," Spring 1971, pp. 21-25, 28-34 (with A. M. McLeod)
"Everybody Speaks a Dialect," Spring 1977, pp. 16-21

Research in the Teaching of English
"The Extent of Learning of Transformational Grammar in One School System," Fall 1975, pp. 184-191 (with Elizabeth Haynes)

Effective English (Books One-Four), Allyn and Bacon, 1961 (with Oscar Hough and Dorothy Sonke)

Literature for Adolescents: Selections and Use, Charles E. Merrill, 1973 (with Robert C. Small, Jr.)

Joseph E. Strzepek, Associate Professor of English Education at the University of Virginia, served as Dick Meade's colleague for more than a dozen years.

Congratulations to 1984 VATE Officers

President: Judy Self, Montgomery County Schools
President-Elect: Jackie Bryant, Virginia Beach Schools
Secretary: Charlotte Sellers, Blacksburg High
Members-at-Large:
Elementary: Helen Kelley, Virginia Department of Education
Middle: Cheri Burton, Roanoke County Schools
Secondary: Bert Carr, Hampton City Schools
College: Pamela Gay, Old Dominion University

How My Personal Computer Is Making My Job Easier

LIN HILL

Forget using a computer in my ninth grade English classroom! What I want is access to a computer in the teachers' workroom. I have held the dual title of teacher and personal computer owner for only three weeks, and so far I have discovered three ways to do a better job and to save time on some of the more nitty-gritty teaching chores.

The first week of school I was planning an extensive composition unit and I found that my new Apple IIe and the Apple Writer II word processing program allowed me to write, revise, edit, and reorder the sequencing, time frames, formats, and phrasing of my unit much faster and easier than I would have ever been able to do with 10 sharp pencils and reams of paper. Once edited to my liking, the unit was printed and stored on my disk. I've already retrieved it from the disk and made some revisions to bring the theoretical unit into line with classroom reality. Next year, for the first time, I'll have a readable copy of the updated unit at my disposal.

That very same week, as I began preparing discussion questions for three parallel novels my academic class would read, the word processing program and the storage capability of the computer came in handy again. The novels permitted many of the questions to be the same, with only slight changes in characters' names or setting being necessary to make the questions relevant to each. I wrote the questions for the first novel and stored them on the disk. Then I created two other files, changing specific questions as needed. Soon I had three perfectly printed sets of questions, each individualized for its particular novel.

By the second week of school, I was beginning to collect grades and so my husband (a novice) and I (a nincompoop) sat down with the VisiCalc software package. In three hours we had the gradebook format for four sections set up, the grades for 102 students transferred, and my own quirky grading system programmed. Vocabulary tests were automatically averaged to yield one grade in the test column. Daily grades were automatically weighted. The rate of computation errors was considerably less than my previous colored-marker, pocket-calculator method of averaging grades. The best feature of the gradebook program, however, is that I can now keep a running grade average for each student. As early as week two, I could track students who were falling behind and this week I updated, recomputed, and monitored grades for all 102 students in just 30 minutes. Interim and final grades should be a snap instead of a three day ordeal.

The gradebook program's only limitation so far is its inability to convert letter grades to numerical grades and vice versa. All grades must be kept numerically; perhaps a new program (the SuperCalc, for instance) or more experienced operators could resolve this problem. Actually, just labeling the conversion issue as a problem makes me realize how de-

pendent I am becoming on my new grading tool; I never viewed converting a 68 to an F or a 95 to an A as much of a problem before.

The nicest surprise came about quite accidentally just this week. As I sat writing two vocabulary tests, I daydreamed aloud about how great it would be if the printer could print directly onto duplicating masters instead of me having to draft tests and handouts and then having to retype them. My husband quite casually reminded me that the printer allows itself to be "force fed" single sheets of paper as well as with the usual continuous feed computer paper. A quick check of the printer manual convinced us we wouldn't break anything, so we printed a duplicating master directly from the computer with the dot matrix printer. It looked good, but a second master printed in bold face type looked like it would produce clearer copies. It did. I printed the second test on the regular computer paper in regular dot matrix type and made a thermofax master from that print. The copies it produced looked terrific, too.

"Do you realize what this means?" I asked a sleepy-eyed colleague using the beat-up electric typewriter in the workroom early the next morning? He neither replied nor looked up.

"I did these masters from a computer and the copies are great. This is fantastic," I bubbled as he typed a row of x's over a test question and muttered under his breath.

Now I find myself daydreaming about what else I might be able to do with my new teaching tool. I'm convinced that my own lack of computer knowledge is the only thing preventing me from eliminating the administrative drudgery of my job and from opening up possibilities for both me and my students.

Two final notes: The system I use is relatively simple and inexpensive. It cost $3,300 this summer, but prices on personal computers are dropping rapidly. Also, my computer training prior to actually using the two software packages was limited to four hours of reading the Apple Writer II manual and doing its prescribed tutorial program. I haven't even completed the two hour-long tutorial for VisiCalc yet, but that short training period was the extent of my husband's VisiCalc knowledge when we set-up my gradebook program.

Lin Hill teaches 9th grade English at Albemarle High School in Albemarle County.

Congratulations to 1983 F. B. Gresham Teacher of the Year

MARIAN MOHR
Fairfax County Schools

Computers in a Writing Project

Patricia Kelly
Warren Self

Convinced by our own experiences that microcomputers and the teaching of writing belonged together, we included an introduction to computers in the 1983 Southwest Virginia Writing Project (SWVWP). We focused on word processing, which seemed to be an appropriate combination of writing and computers and a sensible introduction to computers in general. We hoped a low-key, hands-on experience would reduce any anxiety generated by the mystical awesomeness with which computers are treated in movies, by the strange language used to discuss computers, and by the belief that computers are likely to change teaching and learning and not necessarily for the better. We knew that composing on computers had made beneficial changes in our own writing process, particularly in the ways we revise; we wanted project participants to see that word processing could help them and their students more fully engage in the writing process by giving them a tool that lightens revision.

Our general goals were to: provide participants with an exploratory experience, enough to whet their appetites for learning more about word processing and computers; let them see some instructional possibilities of computers; and furnish them with opportunities to gain enough confidence with one type of program and computer to try other types that might be available in their schools. We hoped participants would learn some of the limitations and advantages of word processing. For instance, we wanted them to learn that the computer does not "do" the writing; composing on a computer is not creating as some language arts teachers apparently believe and therefore refuse to accept papers done with word processors. We wanted to stress that computers are tools with which to get words on paper in the same way that pencils, pens, and typewriters are tools.

Business Solution Center in Roanoke agreed to lend the SWVWP two Apple IIe computers for the summer. We placed the two computers in a library conference room and allowed some participants to schedule computer time while the remainder engaged in other activities. We used our own printers at night to print their text files, and they received fresh copies of their work the next morning.

We selected "Bank Street Writer" (BSW) as their word processing program for several reasons. First, it is designed for students, elementary through high school, and we wanted teachers to gain facility with a program they could use with their students. Second, BSW has a short, effective tutorial program, which leads the user through the functions, using the computer as the instructional tool. Teachers not only could learn the word processing program; they could see how the computer teaches. In addition to the BSW tutorial, step-by-step, on-screen instructions are constantly available as the user creates or edits text, and BSW is designed to make it virtually impossible to lose text or have something unexpected happen. BSW is not as sophisticated (nor as difficult to learn) as other

word processing programs; therefore, it is an excellent entry-level package. Moreover, BSW is available for several brands of computers.

We had been cautioned by some area curriculum supervisors that computer instruction could dissuade some teachers from applying to the institute; for those who did apply and attend, a requirement to do some writing on a computer could become a continuing source of anxiety and frustration. We, of course, have no way of knowing whether people who did not apply had their decisions negatively affected by the inclusion of computers. Every one of the language arts teachers who participated, however, said that their decision to attend the institute was positively influenced by the opportunity to work with computers.

Our experience this summer demonstrates that a number of language arts teachers are excited about learning to use computers and eager to have an apportunity to discover: how the personal computer can ease their own writing and performance of other aspects of their jobs, such as grade management and record keeping; and how computers can positively affect teaching and learning in their classrooms. The participants stated that they were, for example, "thrilled," "overjoyed," "quite enthused," and "very excited" when they discovered that an introduction to computers would be an integral part of their experiences. Only two of the participants expressed any hint of reluctance or fear; for both of them it was part of an ambivalent emotion, the other part being excitement or joy. The reactions of the participants suggest any categorical assumption that language arts teachers are fearful of computers or are reluctant to explore their classroom uses may need reassessment.

Even though participants in the writing project began with a positive attitude about computers, almost all experienced anxiety and frustration when they first used BSW. Although we tried not to innundate them during the introduction with too much information about the program and the computers; although BSW is easy to use; and although we made every effort to keep the participants' first attempts at writing on computers as simple and relaxed as possible, most of the teachers reported that they felt overwhelmed during their first sessions with the computer, anxious about whether they could remember all of the steps involved in creating a text file and saving it to the disk, and frustrated by their inability to remember which keystrokes accomplished certain editing and computer command functions.

One participant who had been "thrilled" when she learned that computers would be a part of the writing project wrote: "That first introduction to the machines didn't leave me full of confidence. I was convinced that I couldn't blow up the library, but I wasn't convinced that the blasted Apple wouldn't decide to eat my stories." Another participant indicated that when she used the computer for the first time, she was "frustrated to the point of panic" and "intimidated" by the procedures she had to follow.

Happily, such negative feelings were only momentary. No participants were so overwhelmed by the newness of the experience that they thought about quitting. As one participant stated during her first week of using

the computer: "I find it frustrating trying to figure out what procedures to go through to add a line, take out a word, move a paragraph, etc. This problem can only be alleviated with computer use. . . ." In fact, all participants by the end of the fifth week of the writing project had eliminated these feelings of anxiety and frustration. Next summer we will try to reduce the anxiety associated with initial computer experiences by distributing and posting at the computers some brief, general reminders. For example, many people had difficulty remembering or "believing" that they should clear the computer's memory after a file had been saved to—and before they retrieved another file from—the disk to edit or revise. Seeing their texts disappear from the screen was too scary for some, so at one point we had a number of strangely merged files.

Once they became accustomed to the keyboard; to computer procedures such as booting the program, saving and retrieving their text files with the diskettes; and to the idiosyncrasies of BSW, these aspects of writing on a computer no longer required so much of their conscious attention; they were able to appreciate more fully the ways in which writing on a computer is more efficient than writing with traditional tools. They saw how quickly they could make substantive changes in their texts without having to do a significant amount of retyping; they saw their revisions freshly and neatly printed; and they began to say that writing on a computer made them feel "almost like . . . professional writer[s]." By the end of the institute, teachers were wanting even more complicated procedures than were available on BSW, such as underlining and more advanced formatting.

Every participant experienced this pattern of moving from initial enthusiasm through momentary anxiety and into a state of confidence and certainty, and we think it is a pattern that will be typical among others who learn to use computers. Any process that is new requires an adjustment period. Having made this adjustment in a classroom environment themselves, these teachers will be much more empathetic with their students when computer instruction becomes a part of the language arts program.

At the conclusion of the writing project, all participants had positive attitudes about using computers in their classrooms. Although we did not have enough time in five weeks to allow intensive exploration of other courseware, we did make available to them some other instructional computer programs, and we did discuss computer assisted instructional possibilities other than word processing. Many participants indicated that they would continue to explore the instructional possibilities of computers. As a result of one participant deciding to develop a presentation on evaluating courseware and computer-based instruction, other participants acquired sufficient knowledge about this new technology not to allow themselves to be easily misled by advertisers' exaggerated claims.

At the end of the five weeks, we sensed that the language arts teachers had benefitted significantly from having computers as part of the institute. One expressed her reaction poetically:

I've really enjoyed the computer.
The Apple IIe's a breeze.
I now feel more confident
As I work on my computerese.
The printouts are a marvel;
They make revision so fun.
I want my own computer.
I guess I'll soon buy one.
We'll have computers next year
At the school where I teach,
So knowing how to use one
Will make them within my reach.

[Lynda Scott]

As with all first experiences, we learned much about what worked and what did not with regard to introductory computer experiences. We know now that language arts teachers are interested in computers' potential for composition instruction, and we will definitely continue to include the computer component in future institutes. We learned that participants wanted and needed more time to work with the computers than we scheduled. And we discovered that even though we provided a typist to help them enter and make changes in their drafts during the final two weeks, participants valued the hands-on experience so much that many insisted on putting their own work in the computer and not taking advantage of the typist's services.

We could have used a few more computers; however, we would never, even if we had the opportunity, operate the institute with one computer for each participant. There were some expressions of initial disappointment that not everyone would have a personal computer, but we learned that having to share two computers helped participants understand how they could incorporate writing and other instructional activities on a computer in their own classrooms—where the ratio between students and computers may never be better than the one-to-ten ratio they enjoyed last summer. At the end of the writing project, one participant wrote: "I feel very confident with the computer, and I would use it quite frequently if I had one for my classroom. Having students 'on task' is very important, but they do finish working at different times. The computer would be a great place for students to go to expend energy, especially since they have been conditioned, through video games, to think that computers are fun. They would be learning and enjoying it." Significantly, this comment was made by a participant who expressed disappointment at the beginning of the writing project when she learned that every person would not have a computer. In a final comment, she indicates she has learned how to use "one" computer in her classroom. The limited number of computers created, then, a realistic environment, one in which teachers will certainly find themselves if they use computers in their classes. By successfully sharing, they began to see the management possibilities for their classroom situations.

The participants' experiences also confirmed our belief that starting to

learn about computers as users or consumers of programs rather than as producers (i.e., learning to program) is an efficient, natural way to begin. The learners do not initially need to know the "grammar" or syntax of computer language. They learn the computer language as they learned English, manipulating the language before they learn to describe how it works. Certainly, after using computers for word processing, the institute fellows will find basic computer instruction more comprehensible, having mastered the simpler computer operations in a writing context. And certainly they will understand that computers have a significant place in the English language arts classroom.

Patricia Kelly, Associate Professor of English Education at Virginia Tech, and Warren Self, Associate Professor of English at Radford University, are co-directors of the SWVWP, a part of the Virginia Writing Project.

Call for Column Manuscripts

The editor for the "Great Teaching Ideas" column in VEB welcomes contributions from readers. If you or one of your colleagues has a teaching idea on "Evaluation" or "Oral Communication," please send it by January 15 to:

Sharon Harris
Albemarle County Schools
401 McIntire Rd.
Charlottesville, VA 22901

Don't worry about style or format, but limit your description to 100-200 words.

Call for Manuscripts

The Spring 1984 issue (deadline: February 1) of *Virginia English Bulletin* will have a double focus:

1. *Oral Communication* may include creative expression, effective expression, how to make oral communication a part of what we normally do in the classroom. It may also focus on drama, creative dramatics, improvisational theatre, or it may relate to other genre and oral activities. In short, how do we attend to improving student speaking.
2. *Evaluation* may relate to effective means of assessing learning experiences, products (compositions, tests, scripts, projects, and so forth) produced by students, or it may relate to different testing programs: national standardized tests or state-mandated competence tests.

Articles attending to purposes and effective strategies for either oral communication or evaluation will be appreciated.

When the Dust Settles

Betty Sweeney and Gayle Lawwood

The computer craze is upon us. No one thinking rationally denies it. Classroom teachers, perhaps once intimidated by language laboratories, television/videotapes, or memory typewriters are now flocking to conventions, workshops, and stores to learn about computers for home and school use; a far cry from the resentment often expressed about the intrusion of the computer into one facet of school life, that of record keeping. When the dust settles on this latest technological invasion, will it settle also on the computers located in classrooms, libraries, and computer laboratories as it has on the previous technological intrusions? Maybe not, for there is some persuasive evidence to the contrary.

First, the computer is becoming very visible in the world outside the school. When one sees the department store saleswoman and the supermarket cashier coping with computer billing, the not-so-subtle message is "If they can cope, why not the educator?" Moreover, computer networking observed in making flight arrangements, in securing books from certain university and public libraries, and between hospitals for medical solutions is convincing evidence that computers are here to stay.

Second, with the invention of the silicon chip, the microcomputer has become readily available, being small enough and cheap enough to become a source of entertainment and intellectual stimulation for the entire family. Educators have been quick to see that school-age youth delight in interacting with this machine to play games and to do programming, and that in the process they are thinking faster, and sometimes better, and increasing their eye-hand coordination. This vehicle for learning is simply waiting for educators to harness for other learning purposes.

Third, the computer's potential and versatility continue to increase. Instead of the 64K memory of the silicon chips currently used in microcomputers, new chips are projected to have 256K memory. In word processing a touch-screen method is being devised whereby the writer simply places a pointer at the spot needing correction and makes the change without prior deletion of the text. Moreover, instead of being limited to mechanical or rote types of performance, computers are being designed to do tasks so similar to human activity that they are being described as "intelligent." More germane to the interests of teachers is the current potential of computers to help students learn the basic process of learning—trial, error, feedback, and self correction. Seymour Papert, author of *Mindstorms: Children, Computers, and Powerful Ideas*, demonstrates this capability with his computerized turtle and a computer language called Logo to help children move from concrete to abstract thinking through computer programming.

Even so, the computer does not replace the teacher, and more especially so the English teacher. To the English teacher remains the task of the

education of the human being. Aspects of English teaching that cannot be presently taught by the computer are

- appreciation of human values
- discovery of self-worth through reading and writing
- insight into the human condition
- appreciation of language
- perception in readers and writers
- flexibility in language use

The computer has the potential, however, to be the most important learning tool available to the teacher. Its uses will vary with the educational philosophy of the teacher and the school division. Because of the generally conservative philosophy of the educational world, the first programs have tended to use computers for skills training—the types of activities that involve arriving at specific answers—and for word processing. In the English classroom, these programs include drills: spelling, vocabulary, identification and recognition exercises (literary terms, elements of grammar); understanding and practice of specific structures for sentences, essays, plots of narratives; application of simple logical principles; practice in drafting compositions; editing: add, delete, rewrite, move material, correct spelling, expand abbreviations, justify margins, hyphenate properly, center titles, number pages, place footnotes; and compiling written material for booklets.

As we come to realize that the most basic of all learning skills is the ability to create, computers will be used more often for problem-solving. Furthermore, the use of the computer as a management tool can be applied at the classroom level. Some uses are

- administering diagnostic tests
- collecting data on students' skills levels
- storing materials used in class (serves as a space saver, facilitates the updating of materials, facilitates individualization, saves time used to retype materials)
- recording grades and averages and keeping averages up-to-date
- recording attendance

English teachers need to understand and appreciate the capabilities and potential of the computer. Right now we can discover the ways in which the computer can free us to do our task best. Educators are, however, at a critical point in the use of computers as educational tools. Teacher interest is high. Unless software moves quickly beyond the skills reinforcement and word processing programs, the use will subside as the novelty wears off. Those computers in the classrooms, libraries, and computer laboratories may begin to collect the dust.

Betty Swiggett is Supervisor of English for the Hampton City Schools. Gayle Lemmond is a 12th grade teacher at Kecoughtan High School.

Applying a Revolutionary Machine in the Classroom

For many students the writing process ends after the first draft of a composition is written. "Do I have to rewrite the whole paper?" is a familiar question heard by writing teachers when students are asked to rework and revise their papers. It's not surprising that students lose interest in writing when faced with the chore of writing, revising, editing and rewriting. The word processor may provide a solution.

A word processor is a computer program that allows writers to revise, edit and proofread their work without rewriting. Typed words appear on the screen instead of on paper. The text can be moved forward or backward and the writers can read what they have written, make corrections or add new material. The computer stores text, makes changes in drafts, and prints final copies. Most word processors have three operating modes: write, edit, and transfer. In the *write mode*, students can concentrate on content without worrying about mistakes. Writers are able to concentrate on developing ideas, and combining sentences to obtain the desired effect or message. Writers have the psychological freedom to play with words to produce a more vivid picture.

In the *edit mode*, the word processor allows student writers to go back and make revisions and corrections without rewriting the entire paper. It helps students distinguish between the composing and editing processes. By removing students' fears of having to recopy an entire draft, the word processor encourages students to carefully and honestly revise and craft their own work.

The *transfer mode* is used to store text on a computer disk, to retrieve work from the computer, and to print text on paper. Writers have the option of printing their composition in a variety of ways: single or double spacing, page numbering and margin setting. Final printing gives a conventional appearance to the composition and the revised text is as neat as the original.

Research has shown that students write more and better when they have access to a word processor. They seem more willing to take chances with their prose, more apt to experiment with different wordings and phrases, while still careful to weed out the grammatical and spelling errors which appeared in their earlier drafts (Engberg, "Word Processors in the English Classroom", *Computers, Reading and Language Arts*, Summer, 1983).

So how do writing teachers apply this revolutionary machine in a classroom with one computer, 30 students who can't type, and constant interruptions? The number of computers available, hunt and peck typing, and class time are all valid concerns of the classroom teacher. Access to the computer can present a problem, but scheduling students could help solve it. Hunt and peck typing can be a time consuming process, but students could make a first draft in pencil and then enter their work into the computer. The key to preventing interruptions is to establish a frequently used classroom routine.

A routine that could successfully handle some of the issues raised could be initiated after students had been given basic instructions on using the computer and its editing functions along with instruction in Donald Murray's PRAISE, QUESTION AND POLISH method of peer editing. This routine was adapted from one used by Tim Riordon, a fifth grade teacher at Eastside School, Eugene, Oregon.

Before giving actual writing assignments, students would go through a prewriting activity to produce ideas of what to write about. Ideally, all stages of writing would take place on the computer, but because of limited time and computer accessability, students would still be required to write some by hand. Rough drafts would be placed in a basket next to computers for a volunteer to type into the word processor. The next day, two students (an author and a peer editor), would sit at the computer and go through a peer editing routine using the PQP method. The peer editor would first make positive responses to what had been written. Next, the editor would help the author make any changes in the story by questioning and/or offering suggestions. Finally, the author would polish the work on the word processor by revising it.

Students who believed their writing was ready to be printed would sign a sheet and indicate how many copies are needed. The teacher would check the list and examine the students' disk file. At this point, the teacher could hold an individual conference with students or enter responses and/or recommendations for changes in the students' text directly on the computer disk.

This routine could make effective use of the word processing system because the bulk of typing would be done by volunteers. Hunt and peck typing is limited to making revisions and corrections. Students exercise more control of their writing, and the majority of spelling and grammatical corrections are made by the author and peer editor. This allows the teacher more time to focus on composition skills. The frequency of use on the word processor enables students to master the editing commands, thus reducing interruptions.

The use of the microcomputer in education has increased so rapidly that it is hard to imagine the number of ways it can be used. Many schools limit the use of the computer to math and science departments, but computers have many applications outside of these fields. They are becoming primarily communication machines. And what is the subject matter of the English curriculum if not communications? It is in writing that the computer offers considerable possibilities for success in the English curriculum.

One of the most valuable uses of microcomputers and word processors in composition instruction is in the teaching of writing revision. One of the goals of writing is to teach children how to edit and revise their own writing. The word processor helps make the revision stage a natural part of the writing process.

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What to Do 'Til the Word Processors Come

Vickie Hill

The WORD PROCESSOR: it's being called the breakthrough of the Why-Johnny-Can't-Write Era, and its proponents make a good case, though it will take a decade or more for the evidence to come trickling in. Meanwhile, composition teachers are becoming more aware that there is a correlation between interest in writing on a computer and the knowledge that writing is now viewed as a *process*, the most important stages of which are *prewriting* and *revising*. And revision is the forte of the word processor.

JUST WHAT IS A WORD PROCESSOR? Word processors are computers—and more. Basically, computers consist of two parts: a keyboard and a monitor or screen. To turn a computer into a word processor, it must first be one that is disk driven. Word processing programs come on floppy, bendable disks that look like miniature records. When a disk is inserted into the computer's disk drive slot, the program on it instructs both the computer and the person using it. It displays a "menu" on the screen telling the writer what capabilities there are to choose from and instructs the computer to store what the writer writes, manipulating the text at given commands. A printer connected to the computer enables the writer to instruct the computer, via the word processing program, to print the text and in a specified form (margins, lines per page).

Now just how will this high tech improve student writing? Claims that computers have motivational capacity and that they appeal to the younger, visually-oriented generations carry considerable educational impact. But the most valuable assistance a word processor can provide composition students is drudgery-free revision. In recent years writing research has generated a new paradigm. Prewriting and revision have been targeted as the pivotal stages in the writing process. Without a surge of creativity sparked in some prewriting activity or without the critical assessment that leads to revision, a writing effort is generally doomed.

For too many of us revision has meant re-writing something in ink after sentences marked "awkward" were re-written and the spelling of circled words corrected. Revision means much more than that. It is the area in which to build skills that lead to clarity, logical development, and style, the *sine qua nons* of good—not just correct, but *effective*—writing. Correct is not only too low a standard for writing; it engages the writer on too low a cognitive level. Effective writing requires the writer to move up to the highest levels of cognitive activity.

The word processor can be used to free the writer to climb up the cognitive scale; there are word processor utilities that will support the writer's performance at the levels of analysis, synthesis, and evaluation. On the menu (roughly equivalent to a book's table of contents), there is a dictionary utility or function. If not, a dictionary program can be added to it or used in conjunction with it. A program like THE WORD, SENSIBLE SPELLER, SPELSTAR, or PROOFREADER can, on command, scan an entire document for the 30-90,000 words it has in its memory

and either asterisk or list the ones that are misspelled. Depending upon the program, the words will either be corrected automatically or corrected by the writer after checking them in a conventional dictionary. Some programs also list all words that are not covered by the program. The writer may then add them to the program, customizing the dictionary for the future.

Homonyms are "the flies-in-the-ointment." A computer never understands words in context. Therefore, the best dictionary programs pull out all homonyms for the writer to check and change if necessary. This means, of course, that homonyms will assume an even greater importance in spelling curricula of the future.

The real value of proofreading programs like these, with their GLOBAL SEARCH function, is their prioritizing of items in the revision phase of the writing process. With a computer dictionary, students are not bogged down at the cognitive level of recall once they begin to work on revising a draft. In fact, spelling and minor usage corrections should be the very last phase of revision. What comes first in the rewriting process is a general assessment of the draft, preferably with comments from others to see if the ideas formed during the pre-writing stage have materialized into something that produces the effect in readers that the writer hoped to produce. If the comments come in negatives like, "It was okay once it got going . . ." or "I got lost in the middle . . . ," the word processor writer will not feel the re-write burden as acutely as the conventional writer. It's a much smaller chore to go back to the screen and write a new beginning, concentrating on "grabbing the reader," knowing that with a few commands the old opening can be deleted, the new one substituted, and all of it printed out again in a matter of seconds.

The least effective revision is that which is thesarus-like, merely substituting words rather than re-writing and/or re-arranging whole blocks of text. This is where the higher cognitive levels of activity that are necessary to produce good writing come in. Reading paragraphs for logical build-up, analyzing the whole text for sequence and coherence—these are the major reconstructions that can improve writing, and these are facilitated by the functions of a word processor.

By a single command, the writer can move whole blocks of text around. Space can be targeted into a point in the text and expanded to allow for more text. If, for instance, the writer's analysis indicates that more detail or clarification is needed at a certain point, sentences or paragraphs can be nudged in and the whole text reprinted. Further, an alternative sentence or paragraph can be typed in at any point and allowed to remain there until a final decision is made as to which should be deleted. Employing this utility, a writer is functioning on the highest cognitive level of all, evaluation. And so it continues. The word processor's capacity for eliminating drudgery eliminates the reluctance to approach writing as a process in which a work is drafted several times to improve its quality.

Computers are presently expensive. Computers with word processing programs and printers are very expensive. Youth from affluent families

are getting hands-on experience with "user friendly" word processing programs like the Bank Street Writer and some other students, primarily in urban areas, have access to libraries that sell computer time on a cost-per-hour basis. What can the schools—and the English teacher in particular—do until the cost is no longer prohibitive for the average student, and long after that for the economically deprived students whose deprivation will only be reinforced by any lack of technologically assisted skills?

For one thing, the text manipulation facilitated by a word processor can be simulated in the drafting stages of students' writing. Students so venerate their words it is difficult to get them to change anything once it is on paper. Getting them to *delete* is a breakthrough. I lead the way by showing them discarded verbiage of my own. Then I simulate the BLOCK MOVE utility of a word processor on an overhead projector.

Using a transparent copy of a sample of faulty writing, I put red dots on either side of the text which is, for example, out of place. Then I proceed to cut it out and fit it into an incision made at the point where it will be more effective. As we talk about why this is better in the next paragraph, or why something must be added to the explanation to make it clearer, or why one more specific detail would provide better support for a generalization, the cognitive level of activity is forced upward. And it is only when this happens during student involvement in the drafting stage that writing will improve qualitatively.

At the conclusion of drafting, we proofread for spelling in a simulation of the word processor's GLOBAL SEARCH utility. Early in the year I create a Custom Dictionary bulletin board. At first the only words in the "dictionary" are some homonyms that are commonly misused. After the first writing assignment it has about thirty—all the (common) words I find misspelled in that set of papers. We use these words as our basic computer dictionary in proofreading the next writing assignment. After that, the list grows unmanageably large and rather esoteric. (Why should everyone have to check the word *farther* when only one person continues to misspell it?) From that point the students develop their personalized computer dictionaries—the words they find in the "corrected words corner" of their graded papers. Subsequently, all final drafts must be checked for misspelling of words in their growing list.

Though the students have fun creating names for their "computer dictionaries" (COMPU-WEB, SPELOKAY, and SPELIT are examples), the proofing process itself is a bit less intoxicating than watching a computer move through a written text at electron speed, listing all the spelling errors, typos, and uncapitalized proper names while flashing WHERE/WEAR and HEAR/HERE and THERE/THEIR/THEY'RE for the writer to check usage of a homonym in context. Nevertheless, it previews for students the mechanical support that will be available to them as future writers and establishes the drafting-revising stage as the crucial part of the writing process.

Wilma Bell is a teacher at Fairfield Middle School in Henrico County. She is a 1982 Fellow of the Capital Writing Project.

Have You Embraced Your Microcomputer Today?

Edgar H. Thompson

Though most English teachers are novices when it comes to computers, some of our peers have already begun to use microcomputers in English classrooms. Programs of software already available can make necessary drill more fun for students. Some software goes beyond mere drill and allows students to interact creatively with a microcomputer. This kind of assistance can relieve teachers from necessary but time consuming tasks so they can work with students individually or in small groups. Programs currently available to English teachers fall into three broad categories: "drill and practice, tutorials, and dialogue systems."

Drill and Practice. Most programs on the market fall into this category. These programs display a small bit of information on the screen and require students to respond in some fashion. Then the computer immediately tells the students whether their response is correct and moves on to the next bit of information. Remedial students find drill and practice programs especially helpful since they are able to work on exercises related to spelling and grammar with little pressure. These students seem to like the immediate feedback they get from the computer.

There are, however, two problems with this type of program. First of all, drill and practice programs don't adequately deal with student error. After two incorrect tries, an answer is given. If a teacher or an assistant is not available to explain, students may not learn the concept either completely or accurately. Such a situation violates the fundamental premise of drill and practice: One bit of knowledge must be mastered before moving on to the next (Wresch, 1982). Second, these programs have a limited amount of motivational power. The newness of the computer keeps students working initially, but after doing the same mundane exercises, one after another, students will eventually tire of using the computer just as they tire of doing paper and pencil exercises.

Still, this type of program can be beneficial in the classroom if used with common sense. Bradley (1982) reports, for example, that sixth graders have success using the computer to do sentence combining exercises, but the teacher is always present. Marcus (1982) successfully uses a program to teach students how to write poetry. Students are asked for a noun, an adjective describing the noun, another adjective, a prepositional phrase telling when or where something happens to the noun, a verb, an adverb describing the noun, and finally another adverb. Although a particular kind of response is called for, this program is unlike most drill and practice programs because the student has a free response. The program doesn't "shut students down" if they change the order or the kind of words they put in. As a result, students have some freedom when creating the final poem, even though the program is rather mechanical in organization.

There is no reason why drill and practice programs can't be used suc-

cessfully in English classrooms. They relieve both teachers and students from the drudgery of repetitive but necessary tasks that must be accomplished. Teachers, however, must not depend on them totally. It is still the interaction between teachers and students that allows the information contained in these programs to be successfully integrated with larger components in the English curriculum.

Tutorial Programs. Instead of moving along from one frame to another in invariate sequence like drill and practice programs, tutorial programs move "from one frame to another depending on how the student has performed on previous frames" (Wresch). Since different answers generate different series of frames, it is likely that no two students will proceed through the program in exactly the same order.

These programs do a better job of accounting for the differences among students. They also free the teacher from hovering over the students since the varied sequencing of the information prevents the student from moving forward until the bit of information under scrutiny has been mastered. Richard Atkinson's tutorial reading programs developed at Stanford have achieved a great deal of success. In California, an experimental group of first graders who used this program gained five months in reading ability beyond a control group who did not use this program. By the end of the second grade, the students in the experimental group were still five months ahead of the control group even though they had not used the program any further. Similar results were achieved when this program was used with fourth through ninth grade Title I students in Washington state (Wresch).

English teachers have always complained about not having enough time to give students the individual attention they need. Tutorial programs can play an important part in providing this time. They allow the computer to give students individual attention while the teacher is working with other students either individually or in groups. The result of this increased attention should be more "time on task" by the student, which should enhance student learning and achievement.

Dialogue Programs. The advantage of this kind of program over the first two is that it allows natural language responses to questions as opposed to limited, predetermined choices. Further, students can ask the computer questions freely, and students, not the computer, control the sequence of learning (Wresch). The most interesting dialogue program described by Wresch is one written by Hugh Burns. Burns developed a series of questions for the computer to ask students based on such commonly used invention strategies as Aristotle's common topics, Burke's pentad, and Pike's tagmemic. Students using this program are able to go to the computer after class, "type in what they think their essay subject might be, and then are led through thirty to sixty minutes of questioning intended to help them think more deeply about their subject" (Wresch). The interplay between the student and the computer is like two humans talking. Wresch describes a typical dialogue between a student using this program and a computer:

Computer: Take a mental photograph of Dreiser's dramatic technique. Describe one important detail.
Karen: I don't understand what you want me to say.
Computer: Concentrate now on seeing Dreiser's dramatic technique. What feature stands out the most? Describe. Your turn, Karen.
Karen: Like the setting?
Computer: Yes, that seems okay.
Karen: The factory vs. the hotel.
Computer: That's the idea, Karen. Give me some more information.
Karen: I see Hurstwood as a scab. Though he's been reduced, he still has some dignity, but the settings aren't dignified. The streets...
Computer: Go on, Karen.
Karen: The streets are ugly, dismal contrast.
Computer: Super, Karen. (Wresch, pp. 488-489)

The potential of this kind of program is exciting. One of the hardest problems I face as a writing teacher is providing enough time in class for students to try new invention strategies. If this time isn't provided, so that I can be there to help them and guide them through the process, students often become discouraged and revert back to their own frequently truncated exploration process. Their final drafts reflect this lack of exploration. A dialogue program would allow me to accomplish an important objective for changing writing behavior without using class time.

All three types of programs have their place in English classrooms. Unfortunately, more drill and practice programs are currently available than tutorial and dialogue programs. Computers are going to become increasingly important, useful tools in English instruction. Monahan (1982) points out that "once individuals are successful in using computers in one way, they are anxious to use them in other ways." For this kind of enthusiasm and curiosity to be kindled among English teachers, we're first going to have to stop avoiding computers. It's time to embrace them, to learn how to use them, and to make them work for us.

References

Bradley, Virginia N. "Improving Students' Writing with Microcomputers." *Language Arts,* 59, No. 7 (1982), pp. 732-743.

Marcus, Stephen. "Compupoem: A Computer-Assisted Writing Activity." *English Journal,* 71, No. 2 (1982), pp. 96-99.

Monahan, Brian D. "Computing and Revising." *English Journal,* 71, No. 7 (1982), pp. 93-94.

Wresch, William. "Computers in English Class: Finally Beyond Grammar and Spelling Drills." *College English,* 44, No. 5 (1982) ,pp. 483-490.

Edgar Thompson teaches in the English Department at Virginia Tech.

I picked up the *Washington Post* the other morning. On the front page was the headline that "computers contribute little to education . . ." While the release of reports critical of public education command lessening attention, the study by the Carnegie Foundation for the Advancement of Teaching reiterated the charge that has become central in any discussion of computers in education: "The technology is available . . . but educational content that makes the investment worthwhile is largely lacking."

To what extent is this assertion true for language arts? Is any software available for assisting with language arts instruction? If there is, is it "worthy of the investment?" Moreover, how does the language arts teacher find just what is available?

In my investigations of software designed for use in language arts instruction, I sought resources useful in listing and evaluating existing programs. No listings dedicated to computer assisted language arts instruction exist; however, for those interested in computer assisted instruction in reading the International Reading Association published this year *Computer Applications in Reading*. For the broadest overview of available software, the *Educational Software Directory* provides an extensive listing organized by subject area, including a brief review, price, hardware specifications, and ordering information. The 1982 edition listed 272 programs in the language arts section; few listings included the year of publication.

A similar clearinghouse is provided by QUEUE, though in a periodical format. Beyond these two listings, the most comprehensive sources are published by the various hardware producers and detail available programs for their machines only. The TRS-80 Radio Shack *Educational Software Sourcebook*, for example, lists 76 reading and 121 language arts programs for 1982. Directories are available from the major computer firms used in the educational market: Apple, Atari, Texas Instruments, Commodore; the *Educational Software Directory* lists addresses for these companies as well as major vendors.

Evaluation of software programs for individual users is difficult and time consuming, even if companies do have a preview policy. Both Microsift and EPIE provide reviews of educational software for subscribers.

The readings on CAI for language arts in the literature are a little more difficult to locate on a regular basis. Although a logical source, until now *English Journal* has declined to devote a regular column to the subject, though irregularly articles do occur in the media column and among the features. *The Computing Teacher*, however, does provide a column on "Computers in the Teaching of English" in which Lester Golub and Robert Shostak summarize interesting developments for and unique applications to English teaching.

The following resources provide a sound basis for locating and evaluating software.

Computer Using Educators
PO Box 18547
San Jose, CA 95158

The Computing Teacher
135 Education
University of Oregon
Eugene, OR 97403

Conduit
100 Lindquist Center
University of Iowa
PO Box 388
Iowa City, IA 52244

DataPro
1805 Underwood Blvd.
Delvan, NJ 08075

Educational Products Information Exchange (EPIE)
PO Box 620
Stony Brook, NY 11790

Educational Software Directory
available from
Libraries Unlimited, Inc.
P.O. Box 263
Littleton, CO 80160

Educational Software Sourcebook
(for TRS-80 Radio Shack computers, check with your local Radio Shack Computer Center)

Intentional Educations Inc.
341 Mt. Auburn St.
Watertown, MA 02172

Microsift
Northwest Regional Educational Laboratory
300 SW Sixth Ave.
Portland, OR 97204

Minnesota Educational Computing Organization
2530 Broadway Dr.
Lauderdale, MN 55113

National Software International, Inc.
330 New Brunswick Avenue
Fords, NJ 08863

Queue, Inc.
5 Chapel Hill Dr.
Fairfield, CT 06432

Resource Software International Inc.
330 New Brunswick Ave.
Fords, NJ 08863

Softswap
San Mateo County
Office of Education
333 Main St.
Redwood City, CA 94063

The movement of computers into the language arts class has begun. Keeping informed and insuring that computers are used to help students increase their language proficiency is a wiser path to follow than complaining about the computer's intrusion and feeling at the mercy of an outside force. These resources can help provide necessary information during these formative years of the computer's role in education.

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1984 NCTE SPRING CONVENTION

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EDITOR'S NOTE: VEB will occasionally run a column on research and its implications for teaching/learning. The first column has been developed by Dick Thompson, who teaches English at Northern Virginia Community College, Annandale.

Research Shows Computer's Promise in Language Arts

Colleges are requiring students to use computers, school systems are purchasing them, and teachers are presently taking an interest in the computer's contribution to student learning. However, this widespread recognition and purchasing is relatively recent, and researchers have not had the opportunity to undertake comprehensive evaluations of the computer's efficacy. The jury is still out on its value in the schools. Preliminary research indicates that computers might be used effectively to grade student essays and to ease the writing task as word processors; the computer also shows promise in helping disadvantaged students with computer assisted instruction (CAI).

WORD PROCESSING. In the past three or four years word processors have sparked the imagination of some English teachers for use in teaching writing. One testimony to this interest is the May 1983 issue of COLLEGE COMPOSITION AND COMMUNICATION which featured the use of word processors in teaching composition. The scant research that has been conducted echoes articles in recent newspapers. Based on interviews with managers and users of word processors, Halpern (1982) underscores the difference in writing in composing with a word processor. Halpern learned that users make significant modifications of their writing during the composing process. She also echoes the managers' concern that today's students be so trained in their own composing when they enter the work force. A case study documents the story of one child using a computer to significantly improve writing friendly letters and short stories (Lawler 1981). And finally, to lend credibility, research contains a warning that word processors are not a panacea or magic elixir to make students enjoy writing or write better. Giovannini (1982) found that college business communications students who practiced writing on a word processor did not have a better attitude towards writing nor a higher level cognitive achievement in business communications than students who did not use a word processor.

ESSAY SCORING WITH WORD PROCESSORS. One of the most interesting uses of word processors promises to significantly cut the time necessary to grade papers. Little (1983) used his wordprocessing program to write comments on his students' essays. Since he found that he

wrote many of the same comments on different students' essays, he was able to program the computer to write these comments with the touch of a button. This use, he reports, cut his grading time in half.

COMPUTER GRADING ESSAYS. Page and Paulus (1968) found that computers read and grade essays about as accurately as human judges. Computers are able to predict teachers' grades reliably because researchers have found countable indicators that correspond to characteristics of good and/or bad writing. Nold and Freedman (1977), for example, found that the length of the essay, the overuse of modals ("should"/"would") or verbs ("to be") and the lack of variety in verb usage, together, consistently indicated teachers' scoring of the essays. This finding certainly squares with a teacher's downgrading an essay because it was too short or because it used "should" and "would" rather than evidence to support its topic sentences, used the verb "to be" or the passive voice rather than action verbs, or used a limited vocabulary—in this case—verbs. Whalen (1971) also found that some mechanics of writing correlated highly with 7th grade students' ability to write. Specifically, he found that capitalization errors, sentence variety (standard deviation of sentence length), variety of words (standard deviation of word length), the number of connectives, the incidence of "then," and the average sentence length (maturity of style) corresponded to writing quality.

Countable indicators, of course, are not limited to errors or negative dimensions of writing. Idea development can be reflected in the number of words a student writes, the length of the paragraph in sentences or words, the number of paragraphs, and/or the number of different words (Thompson 1979). College freshmen who can sustain an idea for more than three or four sentences within a single paragraph and who can do this for three or four paragraphs can also, as a rule, develop their ideas logically and coherently. The computer, then, could be a useful assistant to students in a classroom or a writing laboratory. Between drafts it could read their papers and provide them with valuable feedback to improve their essays. It can even diagnose whether the student's writing follows distinctively masculine or feminine patterns of style. As Mary Hiatt (1978) found in her study, women tended to overuse "really" and favored *causative* ("because," "for," or "since") and *additive* ("and," "in addition," "so . . . did") connectors while men were partial to *illative* ("thus," "hence," "therefore") and *illustrative* ("for example," "that is," and "for instance") connectors. One caveat. Not all information has been found helpful. Schwartz (1980) reported that a computer's reading of essays based on the Flesch readability formula did not help students simplify their writing style significantly more than a control group could without that feedback.

COMPUTER ASSISTED INSTRUCTION (CAI). Although the efficacy of CAI has been investigated in some studies, too few exist to make anything but tentative conclusions. CAI has been used effectively to aid 6th

grade students in spelling (Knutson 1967) and in improving their logical, problem solving ability (Piele 1979). It has been successfully employed to teach Latin and Greek roots to increase students' vocabularies (Scanlan 1976) and to improve reading in elementary and middle schools (Lysiak 1976). Not surprisingly, CAI did not significantly help high school seniors (Anista 1974) or community-college students (Alderman 1978) learn grammar to improve their writing.

CAI has consistently helped disadvantaged students. Army enlisted personnel, non-high school graduates, learning with CAI in language arts did better on all language-arts measures than a control group who received no CAI (Simutis 1979). Students in a compensatory reading program, with the aid of CAI, gained approximately a month more than the national average for compensatory education students (Litman 1973). Rudisill (1976) reports that CAI in a writing lab helped San Antonio college students improve in their basic skills in writing. Results showed that students received substantially fewer "D" and "F" grades with CAI, dropping from 54.02% (D and F rate) to 38.64%.

CONCLUSION. The use of the computer is making positive contributions to student learning in language arts. Evidence seems to support its use to read student essays and for composing on a word processor. And finally, preliminary evidence suggests that CAI might be especially beneficial to disadvantaged students. In the midst of these studies, however, one can easily overlook Dr. Little's use of the word processor to cut down his paper grading time. If the computer can make similar contributions in other areas of our teaching, then, it *is* a welcome asset.

REFERENCES

Alderman, Donald L. EVALUATION OF THE TICCIT COMPUTER-ASSISTED INSTRUCTIONAL SYSTEM IN THE COMMUNITY COLLEGE. FINAL REPORT. Princeton: Educational Testing Service, 1978, ED 167 606.

Antista, John A. A comparative study of computer assisted and non-computer assisted instruction in senior high school English classes. Unpublished doctoral dissertation, Wayne State University, 1974.

Giovannini, Mary. Teaching Business Communications By the Traditional Writing and Word Processing Methods—A Comparison. Paper presented at the Midwest Regional Meeting of the American Business Communication Association, April 1982, ED 216 370.

Halpern, Jeanne W. Effects of Dictation/Word Processing Systems on Teaching Writing. Paper presented at Annual Meeting of the Conference on College Composition and Communication, May 1982, ED 215 357.

Hiatt, Mary P. "The Feminine Style: Theory and Fact." COLLEGE COMPOSITION AND COMMUNICATIONS, 1978, 29, 222-227.

Knutson, Jack Martell. Spelling drills using a computer-assisted instructional system. Unpublished doctoral dissertation, Stanford University, 1967.

Lawler, R. W. ONE CHILD'S LEARNING: INTRODUCING WRITING WITH A COMPUTER. A. I. MEMO NO. 575. Cambridge: MIT, 1980, ED 208 415.

Litman, George H. CAI In Chicago. Paper presented at the Association for Data Systems Annual Convention, April 1973, ED 087 423.

Little, Timothy. "A Grading Technique Using SCRIPSIT," TRS-80 MICRO-COMPUTER NEWS, 1983, 5, 13-15.

Lysiak, Fae et al. COMPUTER ASSISTED INSTRUCTION 1975-76 EVALUATION REPORT. A TITLE I PROGRAM. REVISED. Fort Worth: Texas Dept. of Research and Evaluation, 1976, ED 140 495.

Nold, Ellen W. & Freedman, Sarah W. "An Analysis of Readers' Responses to Essays," RESEARCH IN THE TEACHING OF ENGLISH, 1977, 11, 164-174.

Page, Ellis. & Paulus, Dieter H. THE ANALYSIS OF ESSAYS BY COMPUTER. Connecticut Univ., 1968, ED 028 633.

Piele, Donald T. Microcomputers 'Goto' School. Paper presented at the Annual Meeting of the American Educational Research Association, April 12, 1979, ED 173 776.

Rudisill, Vivian A. A MULTIMEDIA INSTRUCTION IN BASIC ENGLISH. San Antonio Coll., 1976, ED 128 056.

Scanlan, Richard T. "A Computer-Assisted Instruction Course in Vocabulary Building through Latin and Greek Roots," FOREIGN LANGUAGE ANNALS, 1976, 9, 579-583.

Schwartz, Helen J. TEACHING STYLISTIC SIMPLICITY WITH A COMPUTERIZED READABILITY FORMULA. Washington, D.C., 1980, ED 196 014.

Simutis, Zita M. CAI AS AN ADJUNCT TO TEACH BASIC SKILLS, Pensacola, Fla., 1979, ED 171 326.

Thompson, Richard F. "Criteria for Grading Student Writing: A Synthesis of Three Empirical Approaches to Assessing Writing Quality." FLORIDA JOURNAL OF EDUCATIONAL RESEARCH, 1979, 21, 77-95.

Whalen, Thomas E. Assessment of Language Ability by Computer. Paper presented to the California Educational Research Association, April 1971, ED 052 205.

Call for Manuscripts

The Winter 1984 VIRGINIA ENGLISH BULLETIN (deadline: October 1, 1984) will focus on "Literature and Its Teaching." Manuscripts of approximately 5 or 6 pages doublespaced are especially welcome. Among suitable topics are: works successful with students, rationales, effective strategies, a purpose for teaching literature, what appreciation of literature is, stages of reading development, individual reader identity, controversial pieces, favorite author(s), concepts for units, the relationship of literature to life or the curriculum, appropriate books for children or adolescents.

Consideration will also be given to manuscripts that address the implications for English language arts of recent national commission reports on education; e.g., The Carnegie Commission Report or "A Nation at Risk." Suitable topics include: how the reports will help English language arts instruction, aspects or concerns overlooked by the commissions, language influences perception, where the reports are right (or wrong), how we can make effective use of the reports.